

**EPOXY**  
 Use Sikadur Hi-Mod Gel epoxy which is manufactured by Sika Chemical Corporation or its equivalent.  
 Its properties are: Viscosity: non-vag., similar to petroleum jelly; Final Cure: 3 days at 73°F; Compressive Strength: 10,000 PSI; Pot Life: 20 minutes at 73°F.  
 Epoxy must be mixed into concrete ALL DAY PLACEMENT (SEE DETAIL D)

This material is variable. It will mold to the contour of the steel bars in the existing column. Move the location of the column holes horizontally to avoid column spalls. DO NOT CHANGE THE VERTICAL LOCATION OF THE COLUMN HOLES.

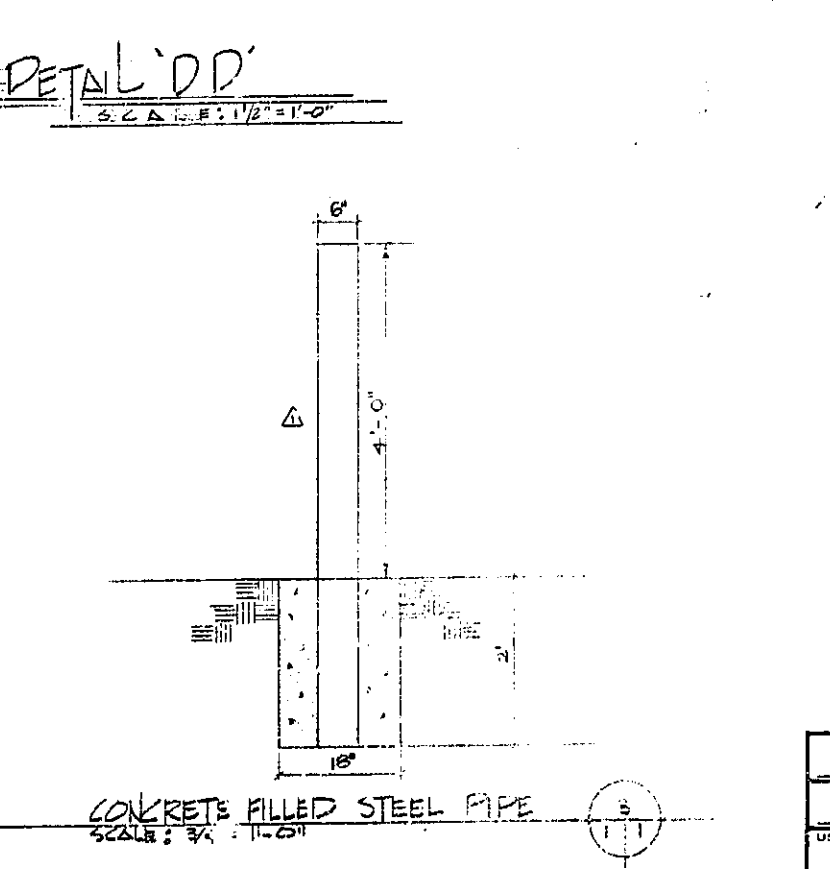
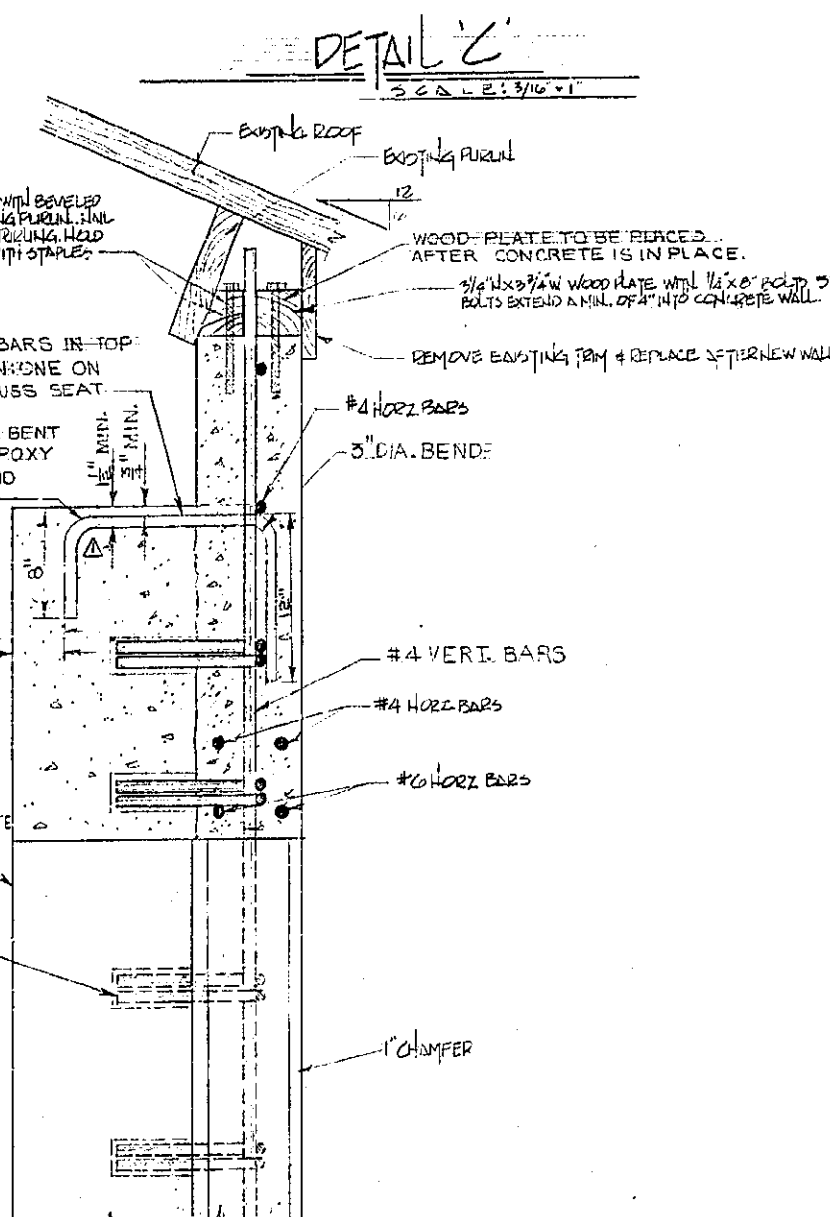
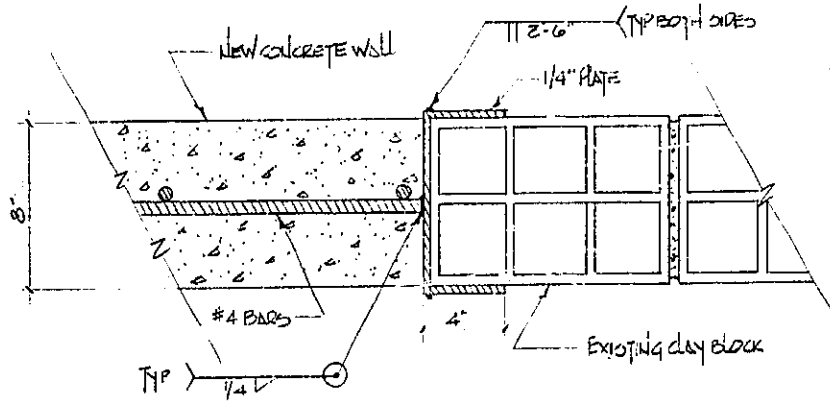
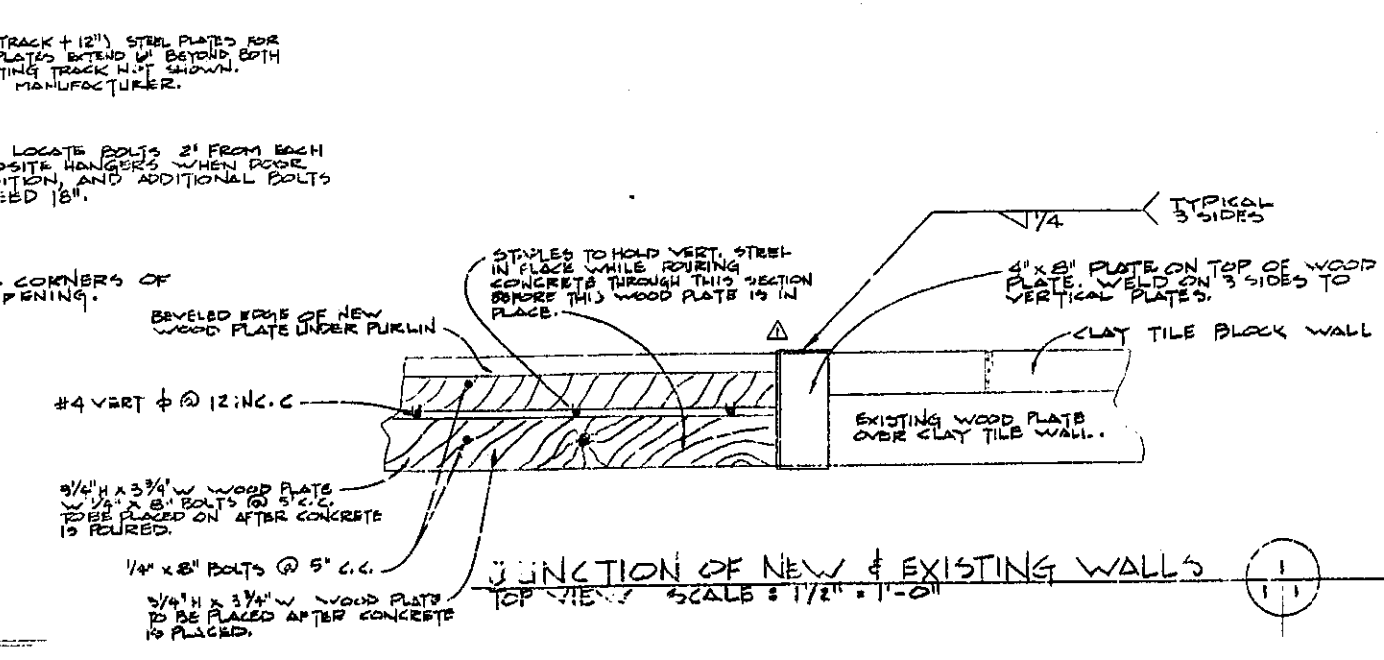
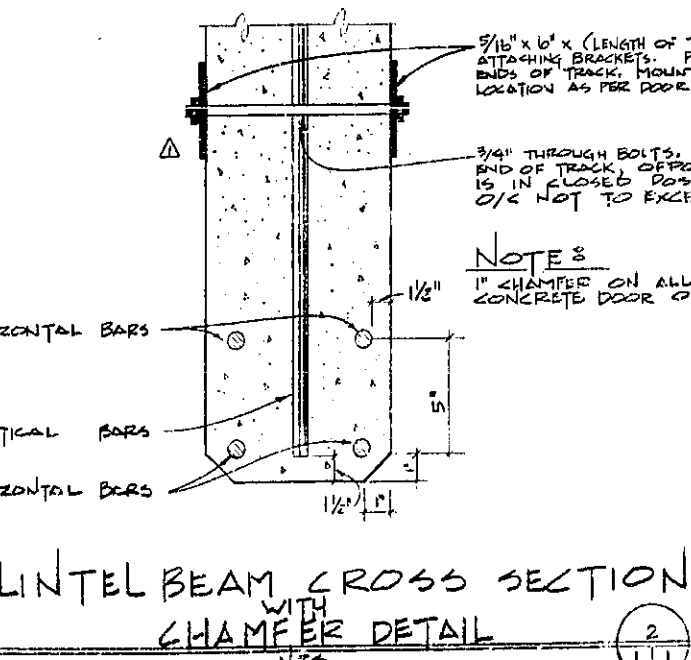
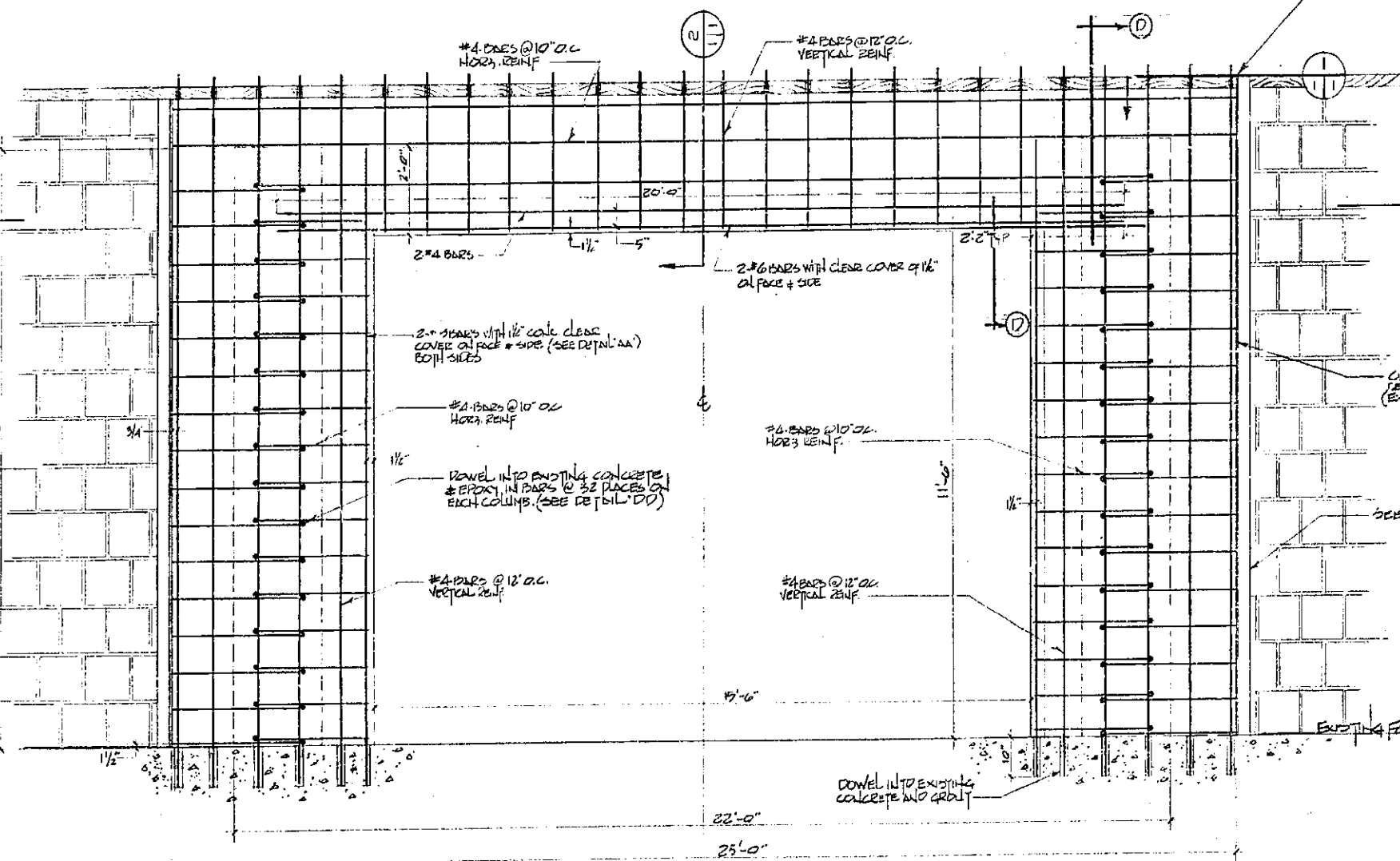
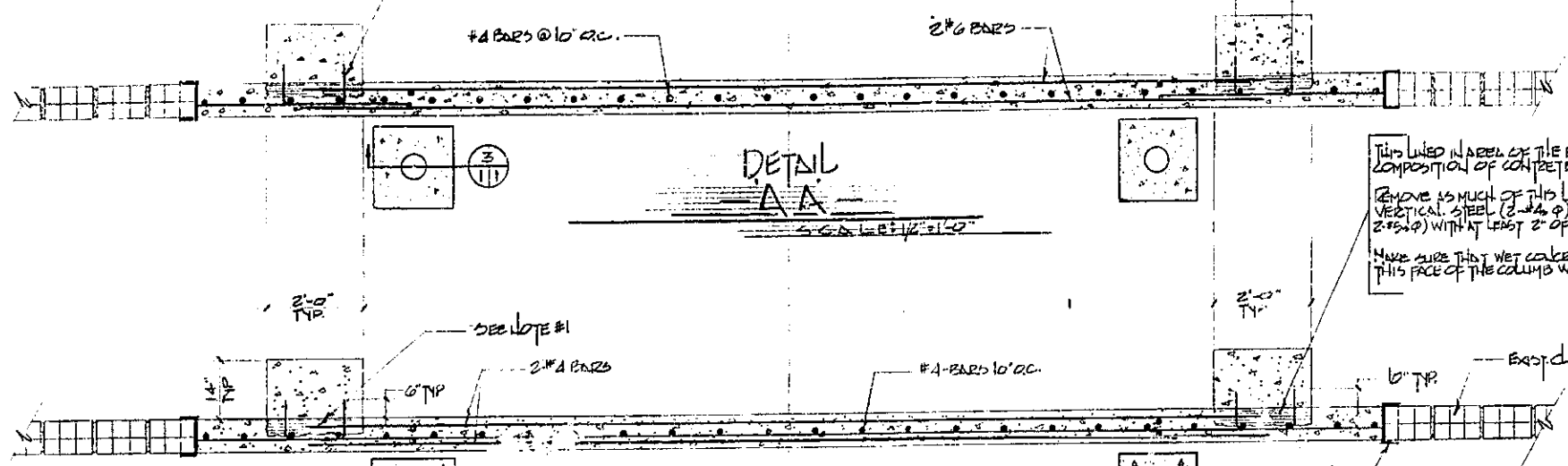
This lined wall of the existing concrete column is an irregular composition of concrete & chunks of the block.  
 Remove as much of this lined area as is necessary to place the vertical steel (2 #4 @ 2' and the horizontal steel (2 #4 @ 2' @ 2' @ 2') WITH AT LEAST 2" OF CLEAR SPACE ON ALL SIDES.  
 Make sure that wet concrete penetrates all the irregular areas and this face of the column when forming the new wall.

Cut existing wood plate at junction of old & new wall. Remove existing wood plate over location of new wall. Replace with new wood plate as shown in (DETAIL D).

3/4" x 3/4" wood plate with beveled edge to fit under existing pulley. This plate will place through round hole vertical steel in place with staples.

LOCATE TWO #4 BARS IN TOP OF EACH COLUMN ONE ON EACH SIDE OF TRUSS SEAT.  
 DRILL NOTCH IN 4" BENT BAR IN PLACE. EPOXY BAR IN NOTCH AND GROUT FULL.

EXISTING CONCRETE COLUMN  
 #4 HORIZ BARS IN PLACE



**ADDITIONAL SPECIFICATIONS**  
 FOR  
 INSTALLATION OF POURED CONCRETE WALL  
 AND  
 SLIDING DOOR FOR BUILDING #1471  
 CHANGE ORDER #1

**REINFORCEMENT SPLICES**  
 1. Do not splice at beams.  
 2. The number 5 bars shall have tension lap splices of no less than 14 inches.  
 3. The number 4 bars shall have tension lap splices of no less than 12 inches.

**REINFORCEMENT BENDS**  
 1. All reinforcement shall be bent cold.  
 2. The minimum diameter of bend for the #5 bars shall be 3-3/4 inches.  
 3. The minimum diameter of bend for the #4 bars shall be 3 inches.

**SURFACE CONDITION OF REINFORCEMENT**  
 The reinforcement shall be free from mud, oil or other coatings which would adversely affect the bonding capacity.

**PLACING REINFORCEMENT**  
 1. Reinforcement shall be placed in the center of the 8 inch wall before the concrete is placed.  
 2. The reinforcement shall be secured against displacements of more than 3/8 inch.

**CONCRETE STRENGTH**  
 The concrete shall have 28-day compressive strength of 3,000 pounds per square inch.

**SLUMP OF CONCRETE**  
 Concrete shall not have a slump of less than three inches unless superplasticizers are used in the mix. Do not increase the slump by the addition of water to the original mix. The water-to-cement ratio must never go above .6 by weight.

**TEST CYLINDERS**  
 Three test cylinders shall be cast from each batch truck at the end of the pouring process from truck.

**AD MIXTURES**  
 An air-entraining admixture shall be used in the concrete mix which conforms to "Specifications for Air-Entraining Admixtures for Concrete" (ASTM C260).

**DEPOSITING CONCRETE**  
 1. Concrete shall be deposited as nearly as practicable in its final position to avoid segregation due to rehandling or flowing.  
 2. Concreting shall be carried on at such a rate that concrete is at all times plastic and flows readily into spaces between reinforcement.

**CONCRETE NOTES**  
 (General Type Remarks)  
 1. **REVISIONS:** This is a reference to the details of design, fabrication, and construction of a steel reinforced concrete wall conforming to American Concrete Institute Standard 318-77.  
 2. **CONCRETE MATERIALS:** Cement shall be a standard brand of portland cement, Type I or Type II conforming to Federal Specification 85-0160/38 Label 101-01. Acceptance of cement will be based upon the manufacturer's mill certificate of compliance with specification requirements. Aggregates shall consist of natural sand and gravel, crushed rock, crushed slag, or other inert materials having clean, rounded grains of strong durable minerals, conforming to Federal Specification 85-0160/38. Maximum aggregate size shall be 1-1/2 inch to 24 except the maximum size of coarse aggregate shall not exceed 3/4 of the minimum clear spacing between reinforcing bars. Water used in mixing concrete shall be clean and free from deleterious amounts of acids, alkalis, or organic materials.  
 3. **STEEL REINFORCEMENT:** Reinforcing bars shall conform to the requirements of Federal Specification QQ-8-62, Type II, Class B49. Wire fabric reinforcement shall conform to ASTM Designation A-185 for 18 mesh (14 gauge).  
 4. **CONCRETE QUALITY:** Concrete shall have a compressive strength of 3000 pounds per square inch at 28 days. Water content shall not be more than 6 gallons per 60 pounds dry of cement. This is total liquid content. Each cubic yard of concrete shall have a minimum of 6 cubic pounds sacks of cement. Maximum slump shall be 4 inches. Reconstituted concrete shall conform to Standard Specification ASTM C-90.  
 5. **FORMS:** Forms may be wall of wood, metal, or other approved materials selected to produce the specified surface finish. Forms shall be sufficiently tight to prevent leakage of the mortar and shall be properly braced or tied together so as to maintain position and shape. Forms shall be removed in such a manner and such a time as to insure complete safety of the structure.  
 6. **TEMPERATURE REQUIREMENTS:** All concrete materials, reinforcement, forms and ground with which the concrete is to come in contact shall be frost free. However the temperature of the surrounding air is below 10°F, all concrete placed in the forms shall have a temperature between 50°F and 100°F and adequate means shall be provided for maintaining a temperature of not less than 50°F for 72 hours and at a temperature above freezing for the remainder of the curing period.  
 7. **CONCRETE SURFACES:** The concrete shall be finished with a smooth finish surface by floating and shall be true line. The finished surface on all concrete shall be free from aggregate particles of honeycombs. Where minor defects appear, they shall be repaired while the concrete is still green by painting with a neat cement grout, and patched with a mix to one part sand and mortar, and finished to match adjacent areas. All lines, wires, nails, etc. shall be cut off at least 1/2 inch back of the surface face and the holes patched as described above.  
 8. **CURING:** All concrete shall be cured for a period of not less than 7 days by keeping all surfaces wet by sprinkling. Non-water-repellent surface may be used in lieu of water curing on approval of the Contracting Officer.  
 9. **AIR ENTRAINMENT:** Air entraining agents conforming to ASTM Designation C-260-64T except the limitation and test on bleeding by concrete containing the agent, shall be used to provide an air content of 11 to 13% of the volume of the concrete. Air content shall be determined by ASTM Standard C-431.  
 10. **DEPOSITING:** Concrete shall be deposited in accordance with ACI 310.  
 11. **LOADING:** No loads shall be placed upon the concrete for a period of 7 days from time of placing. From 7 to 28 days the concrete may be loaded with light loads upon approval of the Contracting Officer. After 28 days, the full design load may be placed upon the concrete.

REVISION	DATE	DESCRIPTION	BY
1			
2			

DEPARTMENT OF THE AIR FORCE  
 OGDEN AIR LOGISTICS CENTER  
 OFFICE OF CIVIL ENGINEERING  
 OGDEN, UTAH

DESIGNED BY: S. PEPP  
 DRAWN BY: S. PEPP  
 DATE: 10/15/78  
 CHECKED BY: DATE  
 APPROVED BY: DATE  
 CHIEF ENGINEERING DESIGN: CHIEF CONSTRUCTION MANAGEMENT: CHIEF ENGINEERING GRANCH:

APPROVED BASE CIVIL ENGINEER: DATE: GROUND SAFETY/SEW: DATE: PROJECT NO.: A-2  
 CORROSION ENGINEER: DATE: FIRE DEPARTMENT: DATE: DRAWING NO.: 2010235  
 USING AGENCY: DATE: BIOENVIRONMENTAL: DATE: SCALE: AS NOTED  
 SHEET: 1 OF 1